Frederick Containment Laboratory Community Advisory Committee (CLCAC)





Report on USAMRIID and Fort Detrick Incidents to Frederick Mayor Michael O'Connor, Frederick City Board of Aldermen, and Frederick County Council January 23, 2020

SUMMARY

On July 15, 2019, the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) received a formal letter from the Centers for Disease Control and Prevention (CDC) ordering that they cease research involving the federally-regulated pathogens known as select agents. The Containment Laboratory Community Advisory Committee (CLCAC) was notified of the order on August 2, 2019. On October 8, 2019, leaders from Fort Detrick, the U.S. Army Medical Research and Development Command, and USAMRIID met with the CLCAC in a public forum to discuss the shutdown and the measures being taken to ensure public safety. This is a brief report on the meeting and includes conclusions made by CLCAC regarding public safety concerns associated with the shutdown.

Link to recording of the October 8, 2019, meeting:

https://cityoffrederick.granicus.com/MediaPlayer.php?view_id=25&clip_id=4037

BACKGROUND

Select Agents: The CDC, a component of the Department of Health and Human Services, and the Animal and Plant Health Inspection Service, a component of the Department of Agriculture, jointly regulate the possession, use, and transfer of select agents, which are infectious and toxic biological materials (i.e., bacteria, viruses, toxins) that have the potential to pose a severe threat to public, animal or plant health. Laboratories that are registered with the Federal Select Agent Program are subject to periodic inspections of their infrastructure, training records, and procedures. If this registration is suspended, laboratories must cease all research involving select agents until all concerns are addressed.

Link to Federal Select Agent Program: https://www.selectagents.gov/

Concerns raised by CDC: As a result of an inspection of USAMRIID in June of 2019, CDC raised concerns about biosafety practices and infrastructure at the laboratory and Fort Detrick. The biosafety practices at USAMRIID found to be insufficient were inadequate training of laboratory staff and standard operating procedures not being correctly followed. The biosafety infrastructure found to be insufficient was a lack of steam decontamination for wastewater effluent from USAMRIID Biosafety Level (BSL)-3 and BSL-4 laboratories. This insufficiency stemmed from damage to the Fort Detrick Steam Sterilization Plant (SSP) during heavy rains in May of 2018. On July 17, 2018, the CLCAC held a public forum with leadership from both USAMRIID and Fort Detrick to discuss this damage and the plans at the time to continue safe operations at the USAMRIID laboratories.

Prior to being damaged, the SSP was used as the final process in decontaminating laboratory wastewater prior to its release into the community water system. Before being delivered through a drain pipe to the SSP, laboratory wastewater was chemically-treated in the USAMRIID building. CDC required the steam sterilization of this chemically-treated wastewater to ensure its safety. During the heavy rains in May, 2018, water may have been released from

the SSP onto the grounds surrounding the SSP building. Subsequent to resuming operations in 2018, USAMRIID relied on chemical sterilization of laboratory liquid effluent (i.e., wastewater) and contracted its removal from Fort Detrick and disposal.

Link to recording of the July 2018 meeting:

https://cityoffrederick.granicus.com/MediaPlayer.php?view_id=25&clip_id=3674

CONCLUSIONS

Leadership from the U.S. Army, who addressed the CLCAC in October of 2019, provided reassurances that their organizations are recommitted to improving their biosafety training and adhering to safe laboratory procedures. They reported that they spent the several months, during which select agent research at USAMRIID had ceased, re-training all relevant personnel and updating relevant standard operating procedures.

In November 2019, the U.S. Army provided their own assessment of the potential for environmental contamination and risks to the community from the May 2018 overflow of the SSP. The report states that they conducted environmental sampling and concluded that there is no risk to the community. In response to advice on environmental safety and contamination from the Environmental Protection Agency, the CLCAC requested this environmental sampling data to allow for independent validation that there is no risk to the community. Although Colonel Nunnally, commander of Fort Detrick, stated during out public meeting in October 2019 that the environmental samples had been collected and tested by a contractor, data had been validated, and that it would be shared with the CLCAC, this data was not shared after repeated follow-up requests from the CLCAC to both USAMRIID and Fort Detrick.

From the information available to us, the CLCAC concludes and advises that there is likely little risk to the community from the deficiencies in biosafety practices, training, and wastewater decontamination found by the CDC and from the overflow of the SSP. The CLCAC believes that the described chemical decontamination methods used for wastewater from USAMRIID laboratories were probably sufficient to ensure that there was little risk of illness among Frederick residents or Fort Detrick staff. However, the CLCAC cannot independently conclude that there is no risk to the community from environmental contamination of the grounds surrounding the SSP.